

SECTION 201 CLEARING AND GRUBBING

201.01 DESCRIPTION. This work is the clearing, grubbing, removing, burning, burying, and disposing of vegetation and debris within the right-of-way limits and easement areas without damaging vegetation, adjacent property and other objects designated to remain in place.

Immediately stop work and notify the Engineer if evidence of aboriginal activity or occupation is encountered.

201.01.1 Clearing. Clearing is felling trees, disposing of stumps, brush, windfalls, logs, limbs, sticks, piles of sawdust, rubbish, debris, vegetation, and other matter within the clearing limits or other areas that interfere with excavation and embankment limits.

201.01.2 Grubbing. Grubbing is removing and disposing of roots, stumps, stubs, duff, matted roots, and debris from the grubbing limits.

201.01.3 Clearing and Grubbing. Is performing both clearing and grubbing under Subsections 201.01.1 and 201.01.2.

201.01.4 Disposal. Disposal is removing, burning, and burying the accumulations from clearing, grubbing, or clearing and grubbing operations meeting all Local, State and Federal laws and regulations.

201.02 RESERVED.

201.03 CONSTRUCTION REQUIREMENTS.

201.03.1 General. Limit dragging, piling, disposing of debris, and other work to areas to be excavated or covered by embankments. Do not damage or destroy vegetation not designated to be removed.

Do not injure or damage vegetation adjacent to streams, ponds, or lakes unless designated for removal in the Contract. Replace damaged or destroyed vegetation designated to be preserved at Contractor expense.

Coat cut or scarred surfaces of trees or shrubs to be preserved with a asphaltum base paint formulated for tree surgery.

Locate pioneer roads or work trails a minimum 20 feet (6.0 m) inside of the clearing limits. Protect live root systems adjacent to, but outside of, the clearing limits.

Close-cut and remove potential hazards, such as leaning trees (alive or dead), and snags within the right-of-way as designated by the Project Manager.

Coordinate clearing, grubbing, or clearing and grubbing with the grading work to meet the requirements of the approved erosion control plan in Subsection 208.03.2. Backfill or grade depressions caused by grubbing to drain. Construct temporary settling basins where scour may occur.

The Project Manager will stake the construction limits for cuts, fills, channel changes, ditches, fence lines, utility relocation, roadside development areas,

selective thinning for sight distance, grubbing, and similar areas to establish clearing and grubbing limits.

201.03.2 Clearing. Clear only within the staked construction limits.

Cut off trees, stumps, brush, shrubs, and other vegetation to within 6-inches (155 mm) of the ground. Fell trees without endangering traffic and injuring trees or objects not designated for removal.

Remove dead vegetation, logs, stumps, limbs, sticks, sawdust piles, rubbish, debris, and other undesirable matter from areas where live shrubbery, brush, or trees are to remain in place.

Merchantable timber is the property of the Contractor.

201.03.3 Grubbing. Grub only within the staked construction limits.

Remove all stumps, roots, logs, timber more than 3-inches (75 mm) in diameter, and all brush, matted roots, and other debris within the grubbing limits to at least 12-inches (305 mm) below the original ground surface.

Grubbing items that do not extend more than 6-inches (155 mm) above the ground line that will be covered with a minimum 4 feet (1.2 m) of subgrade or slope embankment may remain.

201.03.4 Clearing and Grubbing. Clear and grub meeting the requirements of Subsections 201.03.2 and 201.03.3.

201.03.5 Disposal. Dispose of all brush, stumps, windfalls, slash, timber having no commercial value, and all other debris from clearing, grubbing, clearing and grubbing, or other operations to meet all Local, State and Federal requirements at Contractor expense.

A. Burning. Burn materials meeting the State of Montana Open Burning Regulations administered by the Air Quality Bureau of the Montana Department of Health and Environmental Sciences, and all other applicable Local, State and Federal rules and regulations. The general requirements of the Montana Open Burning Regulations regarding burning season and permits are described below.

1. Permits. Obtain an open burning permit from the Air Quality Bureau during the open burning season when burning more than 100 acres (40.5 ha) of forest residue per year.

When burning near public lands during the fire season (May 1 through September 30, or as extended), obtain a burning permit from the Local, State or Federal fire protection agency having jurisdiction.

2. Open Burning Season. The open burning season for forestry slash is from March 1 through November 30. Open burning is not allowed during December, January, or February. Burning from September 1 through November 30, on a day to day basis is subject to ventilation conditions available from the Air Quality Bureau, at 1-800-225-6779. Obtain the ventilation conditions daily before burning.

3. Burning Methods and Instructions. Burning by the Air Curtain Destructor or Forced Air methods are encouraged.

Obtain the Project Manager's approval for burning pits located within the right-of-way limits. Dispose of all pits, ashes, and debris meeting Subsection 201.03.5(B). Locate burning pits at least 100 feet (30.5 m) from free-flowing water or areas where ditches are to be constructed. Locate pits and incinerators to prevent any fire damage or hazard to surrounding vegetation or structures. Contact local fire protection agencies before the start of any burning.

Provide 24 hour monitoring of all burning.

B. Disposal of other Material. Obtain the Project Manager's approval to incorporate non-hazardous solid material into the work for constructive use.

Dispose of material not incorporated into the work at Contractor expense.

201.04 METHOD OF MEASUREMENT. Measurement for clearing, grubbing, or clearing and grubbing is by either of the following methods.

201.04.1 Lump Sum Basis. No measurement or area or quantity is made. Disposal of the material is not measured for payment.

201.04.2 Area Basis. Measurement is by the acre (hectare) for the area actually cleared, to the nearest 0.1 acre (0.04 ha) to the limits in the Contract or as staked by the Project Manager. Disposal is not measured for payment.

201.05 BASIS OF PAYMENT. Payment for the completed and accepted quantities is made under the following:

| <u>Pay Item</u> | <u>Pay Unit</u> |
|-----------------------|-------------------------------|
| Clearing | Lump Sum or Acre (hectare) |
| Grubbing | Lump Sum or Acre (hectare) |
| Clearing and Grubbing | Lump Sum or Acre (hectare) |

Payment at the contract unit price is full compensation for all resources necessary to complete the item of work under the Contract.

201.05.1 Lump Sum Basis. Payments will be prorated for the percentage of completed work for each item listed as a lump sum item in the Contract.

201.05.2 Area Basis. No payment is made or allowed for any areas not actually cleared (i.e. Present Traveled Way, Paved surfaces, etc.)

201.05.4 Exclusion. When the Contract does not contain a pay item for clearing, grubbing, or clearing and grubbing, the work is incidental to and included in payment for other work items.